



Figure 9-12. Upper panel: Observed propagation speeds c' for frontal features moving through the nearshore, compared with scale estimate $\text{sqrt}(g'.H')$, where $H'=H_1.H_2/H$. Observed speeds are slower than scale speeds due to viscous effects and the presence of a “headwind”. Lower panel: Observed cross-shore water velocities are faster than propagation speed of feature, illustrating that water is continuously flowing toward the head of the intruding feature.